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<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/790,920	VIERHEILIG ET AL.	
	Examiner	Art Unit	
	Ardith E. Hertzog	1754	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to all papers filed 11/28/2005.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____.                                               |

### EXAMINER'S AMENDMENT/REASONS FOR ALLOWANCE

1. This application is in condition for allowance **except** for the presence of claims 20-28, drawn to an invention non-elected **without** traverse in the "Response to Restriction Requirement" filed June 23, 2005. **Accordingly**, claims 20-28 have been cancelled **without prejudice**.

2. The following is an examiner's statement of reasons for allowance: With the "Amendment and Reply Under 37 CFR 1.111" filed November 28, 2005 **and** the grant of the Petition filed therewith (per the Decision mailed December 27, 2005), this application is now in condition for allowance. In particular, the effective filing date of instant claims 1-19 is now **at least as early as February 23, 1999** (i.e., the filing date of **now** parent application number 09/256,621). **Hence**, the 35 U.S.C. § 102(a) rejection of claims 1-19 as clearly anticipated by WO 99/44201 (hereinafter "WO '201"), as set forth in the prior Office action, must be **withdrawn**, since WO '201, published August 26, 1999, is no longer available as prior art. **Thus**, instant claims 14-19 are considered allowable over the prior art of record, since the prior art of record fails to teach or to have suggested processes for removing a reduced sulfur species from a process stream via the **very specific** attrition-resistant particulate sorbent **required** by step (a) of instant independent claim 14 (such sorbent essentially that recited in the product claims of parent application number 09/541,204, now US 6,812,189). With respect to the 35 U.S.C. § 103(a) rejection of claims 1, 2 and 4-13 as being unpatentable over US 5,254,516 (Gupta et al.) in view of US 4,088,736 (Courty et al.), as set forth in the prior

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Office action, applicant's arguments have been carefully considered, and, in light of the amendment to instant independent claim 1,<sup>1</sup> found **persuasive**:

In particular, applicants have amended claim 1 to recite that the particle used in the claimed process is substantially free of unreacted alumina. Neither of Gupta '516 or Courty '736, either alone or in combination, render the present claims obvious because neither of Gupta '516 or Courty '736 teach the desirability of processes using a particle that is substantially free of unreacted alumina. ...

Moreover, if anything, Courty '736 teaches away from the present invention. As the Examiner states, Courty '736 discloses "a mass comprising zinc oxide, *alumina*, and a group IIA metal oxide" (emphasis added). The compositions of Courty '736 include those compositions have a substantial stoichiometric excess of unreacted alumina (or alumina plus silica) as compared to calcium oxide content (Courty '736 at col. 1, line 64 to col. 2, line 7). Accordingly, Courty '736 does not teach the desirability of processes using a particle that is substantially free of unreacted alumina. (remarks accompanying amendment at p. 10, penultimate full paragraph, and p. 11, first paragraph)

**Accordingly**, the 35 U.S.C. § 103(a) rejection of claims 1, 2 and 4-13 as being unpatentable over Gupta '516 in view of Courty '736 has been **withdrawn**, and claims 1-13 are considered allowable over the prior art of record.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

### ***Conclusion***

4. Any inquiry concerning this communication or any earlier communications from

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<sup>1</sup> It is noted that the negative limitation now recited in instant claim 1 is clearly supported by applicant's disclosure as originally filed; see, for example, paragraph [0029] of the specification and original claim 14.

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the examiner should be directed to Ardith E. Hertzog at 571-272-1347. The examiner can normally be reached on Monday through Friday (from about 7:30 a.m. - 3:30 p.m.).

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman, can be reached at 571-272-1358. The central fax number for all communications is now 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. For any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
AEH

January 31, 2006

  
STANLEY S. SILVERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700